

A Twelve Month Follow-up Study of Patients Recruited Through Social Media Who Fulfilled ASAS/Calin Criteria for Inflammatory Back Pain

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INTRODUCTION

Epidemiologic data on inflammatory back pain (IBP) prevalence within the UK is still lacking. Previous studies show delay in diagnosis and management of IBP for up to 8 years. This is partly due to lack of awareness among Public and Primary care practitioners. New criteria have been developed to identify conditions at an early stage with a view to reducing times to referral (Table 1).

In a previous study we identified patients corresponding to the ASAS or Calin criteria for IBP. In the current work those participants who were positive for IBP in the original study were followed up over a twelve month period to see how their back pain had changed, whether treatment was actively sought and what treatment(s) were provided.

Table 1. Calin and ASAS Criteria for Inflammatory Back Pain (IBP)¹

Calin Criteria for IBP	ASAS IBP Criteria
Age at onset < 40 years	Age at onset < 40 years
Insidious onset	Insidious onset
Improvement with exercise	Improvement with exercise
Duration of back pain > 3 months	Pain at night (with improvement upon getting up)
Morning stiffness	No improvement with rest

ASAS: Assessment of spondyloarthritis international society; Calin and ASAS diagnosis each requires four of these five criteria to be present.

OBJECTIVES

The aims of this study were to conduct a follow-up study over 12 months of patients who met the criteria for IBP :

- To determine whether patients improved or deteriorated over the 12 month follow-up period.
- To see whether providing relevant information on IBP to patients led to new diagnoses.
- To identify the treatments provided and evaluate the effectiveness of the referral process.

METHODS

A cross-sectional survey of adults (≥18 years) with chronic back pain (> 3 months) was conducted to identify patients who had IBP. Recruitment was targeted to enlist UK participants using social media (Facebook) and national newspaper (Daily Mail) advertisements. Online questionnaire-based surveys supplemented by telephone response were completed. The primary outcome measure was the number of respondents who fulfilled the ASAS and Calin diagnostic criteria for IBP. Those participants who were positive at baseline for IBP (by either the ASAS or Calin criteria) were offered an information leaflet and asked to complete follow-up questionnaires at 6 and 12 months.

RESULTS

- On average the condition of IBP positive patients changed little, with the trend being towards a slight decline over a 12 month period
 - Participants who completed the initial survey totalled 586; of these, 304 satisfied either the ASAS or Calin criteria for IBP. Many patients at both 6 and 12 months follow-up reported that their back pain was unchanged (**Figure 1a**), with more reporting a decline (37% of responses) than an improvement (31% of responses). Evaluation of changes in quality of life using mean EQ5D scores also suggested a small deterioration (**Figure 1b**)

Figure 1a. Has Your Back Pain Changed Since You Last Completed the Survey?

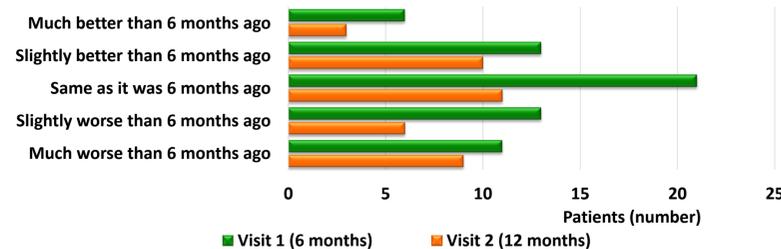


Figure 1a. Many IBP positive (ASAS or Calin) patients at 6 and 12 months follow-up have back pain that has not changed very much over the previous 6 months.

Figure 1b. Quality of Life – EQ5D Mean Scores

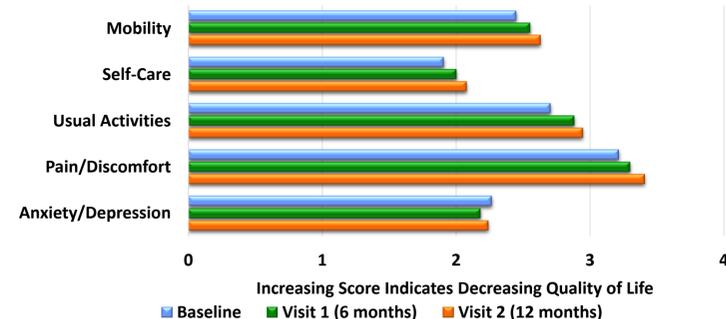


Figure 1b. Evaluation of changes in mean EQ5D scores over a 12 month follow-up period suggest a slight deterioration in patients' quality of life.

- Providing IBP positive participants with a link to an information leaflet did not result in any new IBP diagnoses
 - Participants who satisfied either the ASAS or Calin criteria for IBP were sent an electronic link to a patient information leaflet (**Figure 2a**). The leaflet provided information on recognising IBP, the autoimmune conditions associated with it, the recommended treatments and the importance of early diagnosis for proper management of the condition. Of the 91 patients who completed the 6 month follow-up questionnaire, 28 downloaded the leaflet. Of these, 16 patients also completed the 12 month follow-up questionnaire. However, of the 10 who had been previously undiagnosed only 2 were referred and no new IBP diagnoses resulted (**Figure 2b**)

Figure 2a. Patient Information Leaflet



Figure 2a. An electronic link to a patient information leaflet was provided to all participants who satisfied either the ASAS or Calin criteria for IBP.

Figure 2b. Response to Patient Information

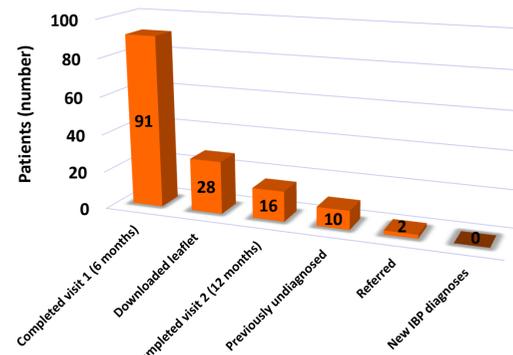


Figure 2b. Although 91 patients completed the 6 month follow-up questionnaire, no new diagnoses of IBP were made.

- Most IBP positive participants had visited a GP
 - Of the 91 patients who completed a follow-up questionnaire at 6 months 57 (63%) had seen a GP since completing the original survey, 6 (7%) had seen a rheumatologist, 16 (18%) had physiotherapy and 8 (9%) were finally diagnosed with a spondyloarthropathy (eg. Ankylosing Spondylitis) (**Figure 3a-c**).
 - Of the 67 patients who completed a follow-up questionnaire at 12 months 41 (61%) had seen a GP, 5 (7%) had seen a rheumatologist, 13 (19%) had physiotherapy and 9 (13%) were finally diagnosed with a spondyloarthropathy (**Figure 3d-f**).
 - Only 1 patient (1.5%) at 12 month follow-up (none at 6 month follow-up) had received biologic treatment with anti-TNF

Figure 3a-c. Follow-up at Six Months

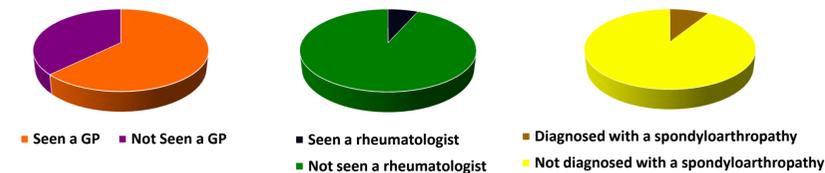


Figure 3a-c. Of the 91 patients who completed a 6 month follow-up questionnaire 63% had seen a GP, 7% had seen a rheumatologist and 9% were diagnosed with a spondyloarthropathy.

Figure 3d-f. Follow-up at Twelve Months

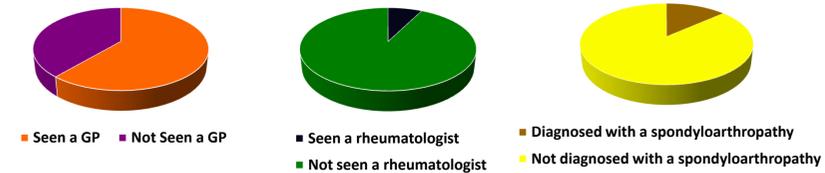


Figure 3d-f. Of the 67 patients who completed a 12 month follow-up questionnaire 61% had seen a GP, 7% had seen a rheumatologist and 13% were diagnosed with a spondyloarthropathy.

CONCLUSIONS

- Patients who were IBP positive (ASAS or Calin) in an online survey, many recruited using social media, deteriorated slightly over a 12 month follow-up period.
- Providing these IBP positive participants with a link to an information leaflet did not result in any new IBP diagnoses.
- Although most patients had seen a GP, only 7% had seen a rheumatologist despite fulfilling the IBP criteria.
- Primary care education on IBP is key in the early diagnosis of Spondyloarthropathy.

REFERENCE

1. Akgul, O. and Ozgocmen, S. (2011) World Journal of Orthopedics, 2 (12), 107-115.

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DISCLOSURES

AG Wade and GM Crawford are directors of Patients Direct, a private company, commissioned by Abbvie to design and undertake the survey.